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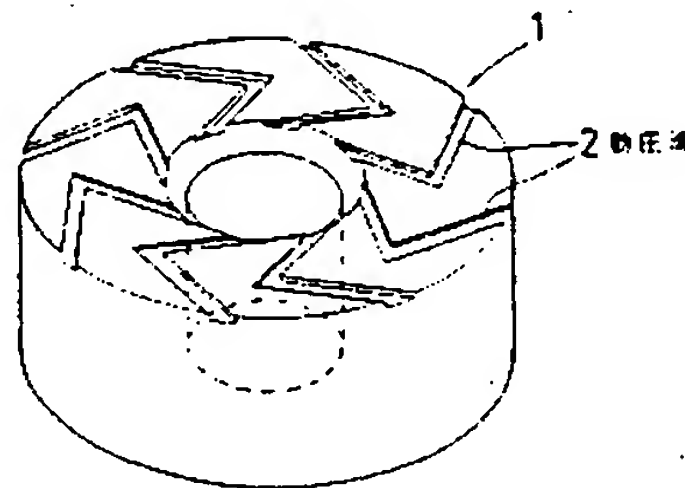
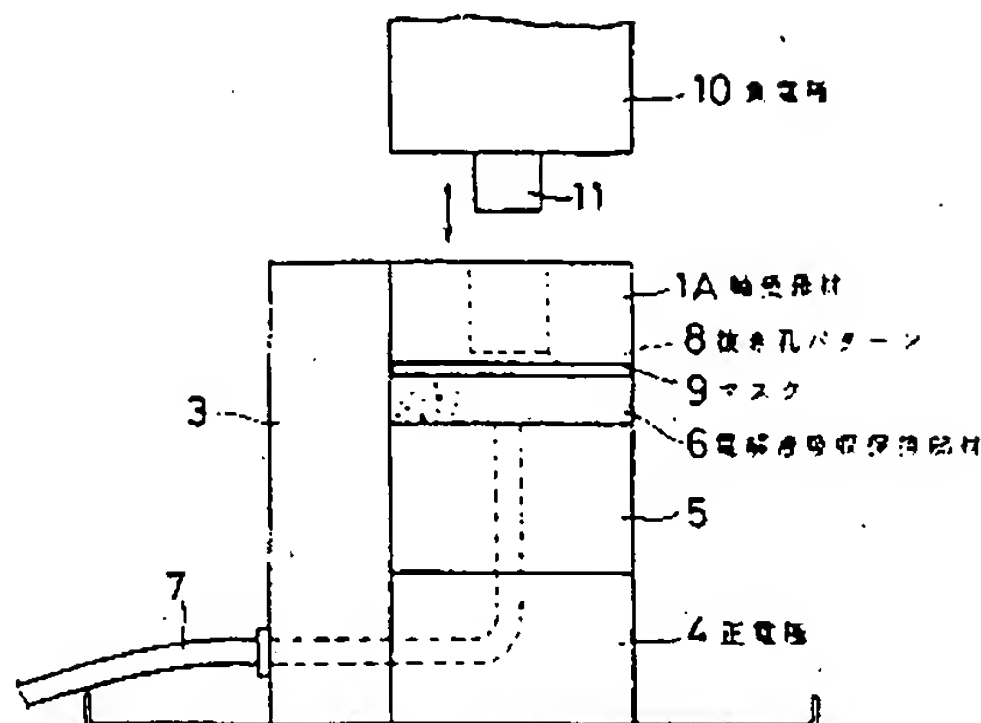
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TITLE : FORMATION OF DYNAMIC-PRESSURE
GROOVE OF DYNAMIC
PRESSURE-TYPE FLUID BEARING



ABSTRACT : PURPOSE To produce a dynamic pressure-type fluid bearing on which a dynamic-pressure groove is formed with high precision by depositing an electrolyte absorbed in a holding member on one surface of a bearing base material through a discharge-port pattern formed in a mask, and applying electrolytic etching.

CONSTITUTION A carbon base 5, an electrolyte absorbing and holding member 6, and a mask 9 having the discharge-port pattern 8 corresponding to a dynamic-pressure groove 2 are successively placed on a positive electrode 4. A bearing base material 1A consisting of an annular bearing body having a through hole at its center is placed on the mask 9, and the holding member 6 is sufficiently impregnated with an electrolyte through a pipe 7. A negative electrode 10 is then lowered, the protrusion 11 is inserted into the through hole of the base material 1A, a specified pressure is exerted on the base material 1A, mask 9, and holding member 6, and a current is applied between both electrodes 4 and 10. The electrolyte is deposited on one surface of the base material 1A through the pattern 8, and the dynamic pressure groove 2 having a shape corresponding to the pattern 8 is formed by electrolytic etching. By this method, a thrust fluid bearing 1 having the highly precise dynamic-pressure groove 2 is formed easily and rapidly.

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